

Is Grimm's Fairy Tale "The Hare and the Hedgehog", a Mythical Report of a Lunar Eclipse.

An interpretation by Sepp Rothwangl

Must not Eim be the same as Embach (mother-beck, fr. emma mother. . .) near Dorpat, whose origin is reported as follows? When God had created heaven and earth, he wished to bestow a king on the beasts to keep them in order, and commanded them to dig for his reception a deep broad beck, on whose banks he might walk; the earth dug out of it was to make a hill for the king to live on. All the beasts set to work; the hare measured the land; the fox's brush tailing after him marked the course of the stream; when they had finished hollowing out the bed, God poured water into it out of his golden bowl.

--J. Grimm, Teutonic Mythology upon an Estonian myth

The collapse of the hourglass-shaped Meru, caused by Buddha's death, with sun and moon rolling down: the moon shows the hare contained in it.

--Herta von Dechend. Hamlet's Mill

Another great example of how fairy tales and myths are related to star lore and may have originated with it is one of the famous fairy tales by the Brothers Grimm, "The Hare and the Hedgehog." It may be a report of a total lunar eclipse, presumably distorted by later Christian revisions. We owe the first astronomical and calendrical interpretation of this fairy tale to the German author Koneckis¹, and other research even offers us an opportunity to date it.²

Similar tales exist in about 60 different versions, but common to all is a race between the fleet-footed and the slow. In the cultural-astronomical and calendrical view, these can be explained as the movement of the Sun and the Moon. A hedgehog, tortoise, crab, pig, or snail plays the slow sun; the faster moon is portrayed by a hare, fox, wolf, stag, birds, or the devil.

"The Hare and The Hedgehog" is a popular fairy tale and was first published in the Northern German dialect Plattdeutsch by Wilhelm Schroeder in 1840 after he heard the story at Buxhoevden. In 1843, the Brothers Grimm added it to the 5th edition of their *Kinder und Hausmaerchen*.

The narrative begins with a framing story, where the grandfather tells the story to the readers.

The Hare and The Hedgehog

¹ Koneckis, Ralf: Mythen und Märchen. Was die Sterne darüber verraten. Franck Kosmos, Stuttgart, 1994

² Rothwangl, Sepp: Is Grimms' Fairy Tale "The Hare and The Hedgehog" a Mythical Report of a Lunar Eclipse? Zvagnznota Debess. 2007/08 Gada Ziema, Latvijas Universitātes Astronomijas Instituta. Going to be published in the proceedings of the SEAC conference "Astronomy and Cosmology in Folk Traditions and Cultural Heritage" 2007. Klaipeda, Lithuania

This story sounds rather like a lie, my children, but true it is nevertheless, because my grandfather, from whom I had it, always used to say when he told it: "It must be true; nevertheless, my son, no one could tell it at all if it was different." And the story itself happened in this way:

It was on a Sunday morning in the autumn time, just as buckwheat flowered: the sun had risen brightly in the sky, the morning wind went over the cleared fields, the larks sang in warm air, the bees hummed in the buckwheat, the people went to the church, and all creatures were amusing themselves, including the Swinegel (Pig-hedgehog).

The Swinegel was at his door. He looked outside into the morning wind and hummed a small song to himself, so well and so badly, as a Swinegel sings on a fair Sunday morning. While singing, it occurred to him that he could walk a little while in the field and see after his carrots while his wife washed and cared for the children. The carrots were close to his house, and he used to eat them with his family; therefore, he regarded them as his own property.

No sooner said than done! The Swinegel closed the entry door behind him and made his way to the field. He was not far from the house and was about to turn just around the bushes by the field after the carrot field when he met the hare, who had gone out on similar business, i.e., to look after his cabbages.

When the Swinegel saw the hare, he offered a friendly good morning to him. The hare, however, who thought he was a distinguished gentleman, would not answer the Swinegel's greeting, but said to him quite scornfully, "How it is that you run around in the field so early in the morning?" "I'm taking a walk," said the Swinegel. "Walking?" laughed the hare, "I rather think you could use your legs better for other things. " This response made the Swinegel tremendously sad, because he could bear, but he did not like to hear jokes about his legs, which were naturally bent.

"You probably think," said the Swinegel now to the hare, "that you can run better with your legs ? " "I think so," said the hare. "I would bet," said the Swinegel, "that if we had a race, I would run faster than you run." "That is ridiculous, you with your bent legs," said the hare. "But if your heart is set on it, what shall we bet?" "A golden Louis d'or (coin) and a bottle of cognac," said the Swinegel. "Accepted!" said the hare. "Promise it, and then we can start right here."

"No, such a great hurry is not necessary," said the Swinegel, "I have not eaten yet; I only want to go home and have a little breakfast. In a half hour, I will be here again at the workstation."

So the Swinegel went home, because the hare was agreeable. On the way home, the Swinegel said to himself: the hare relies on his long legs, but I want to beat him. He is a distinguished gentleman, but nevertheless only a stupid chap, and he has to pay.

When the Swinegel arrived home, he said to his wife, " Woman, put on your coat! You must go with me to the field." "What is the matter?" his wife said. "I have a bet with the hare for a golden Louis d'or and a bottle of cognac; I want to race with him for the bet, and you will help me." "Oh my God, man," the Swinegel's wife started to moan, " you are not very bright! Did you completely lose your mind? How can you

want to race with the hare for a bet?" "Shut up, woman," said the Swinegel. "That is my affair. Do not interfere in men's business! March, put on your coat and come along!" What could the Swinegel's woman do? She had to obey, if she wanted to or not.

As they were on their way together, the Swinegel spoke to its wife: "Now listen to what I want to tell you. You see, we will race on this long field. The hare runs in the one furrow and I in the other one. Now, you have nothing else to do than to stay as you are here down in the furrow, and when the hare arrives on the other furrow, then you call to him: I am already here!"

So they came to the field. The Swinegel placed his wife at the workstation and went up the field to his spot. When he arrived, the hare was already there. "Can we start?" the hare said. "Yes," said the Swinegel. "Let's start!" And they placed themselves in their furrows. The hare counted: "One, two, three!" and ran like a storm wind down the field. The Swinegel, however, ran only about three steps, then he ducked into the furrow and remained calmly sitting.

When the hare arrived in full run down at the other end of the field, the Swinegel's wife called to him: "I am already here!" The hare stopped and was not a little surprised: he did not realize the difference, and thought it was the Swinegel who called because his wife looked just like her man.

The hare however thought: "Something strange is happening here." He called: "Again run, again run!" And away he went again like a storm wind, so fast that his ears flew around his head. The Swinegel's wife, however, stopped calmly at the starting place. When the hare arrived at the end of the furrow, the Swinegel called to him, "I am already here!" The hare, however, completely annoyed, cried: "Again run, again run!" "If you wish," answered the Swinegel, "It's up to you, whatever you like." So the hare ran 73 times more, and the Swinegel always was first. Each time, if the hare arrived at one end of the furrow or the other, the Swinegel or his wife called out, "I am already here!"

The 74th time, however, the hare did not race to the end of row. In the middle of the field, he fell to the earth dead, the blood shooting out of his neck.

The Swinegel took his prizes, the Louis d'or and the bottle of cognac, called his wife from the field, and both happily went home together. And if they did not die, they live there still. So it happened that on the heath of Buxtehude, the Swinegel ran the hare to death, and since that time, no hare has dared to race against the Swinegel of Buxtehude for a bet.

The moral of this story is first of all, that no one, even if he is the finest and fanciest one, should make jokes about a small man, even if he is only a Swinegel. Second, if one wants to marry, it is advisable that he take a woman of his own status, who looks like him in just that way. Whoever is a Swinegel needs to look for a wife who is also a Swinegel.

The fairy tale begins with a frame in which the narrator and his grandfather attest to the truth of this story, which ends with a typical moral. The plot itself starts on a special autumn day and includes a special hedgehog -- the Swinigel. Here we get the first astronomical hint: Swin is an old name for the sun and identifies the first

competitor, whose prickles are reminiscent of the rays of the Sun. Later on the fairy tale tells of the unfair race and how the hare runs exactly 73 times until the blood flows from his neck on the 74th run.

The lunar 73 day cycle

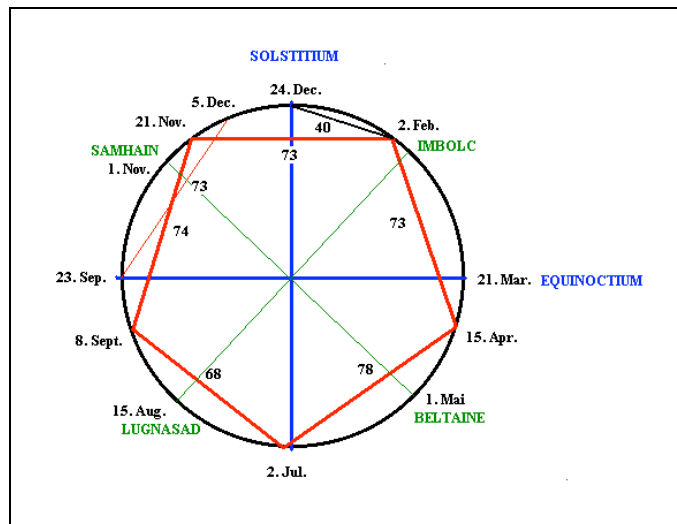
Two and a half lunations add up to almost exactly 73 days, the fifth part of a year with 365 days. This division by five is echoed in St. Mary's feast days in the former orthodox calendar:

2 Feb, Candlemas (Purification); 15 Apr, Raphael; 2 July, Visitation; 8 Sep, Birth; 21 Nov, Sacrifice.

The above suggests a close relation between St. Mary and the Moon or pagan lunar goddess Artemis, whose major sanctuary was in Ephesus, now one of the Holy Virgin's mausoleums. Another echo of this relationship is shown in the Catholic rosary (prayer bead necklace) having 59 pearls, the number of days in two lunar months.



8.1. St. Mary of Guadalupe with the moon



8.2. Division of the year into fifths by feast days

The number 73 also appears in Latvian Dainas:³

*Brahmen came together / On the hill,
They hung up their sabres / On the SACRED TREE,
The sacred tree has / NINE branches,
Each branch at its tip / Has NINE blossoms,
Each blossom at its tip / Has NINE berries.*

The result given in this Daina is 730 (1+ 9*9*9), equal to the 365 days plus 365 nights of a year.

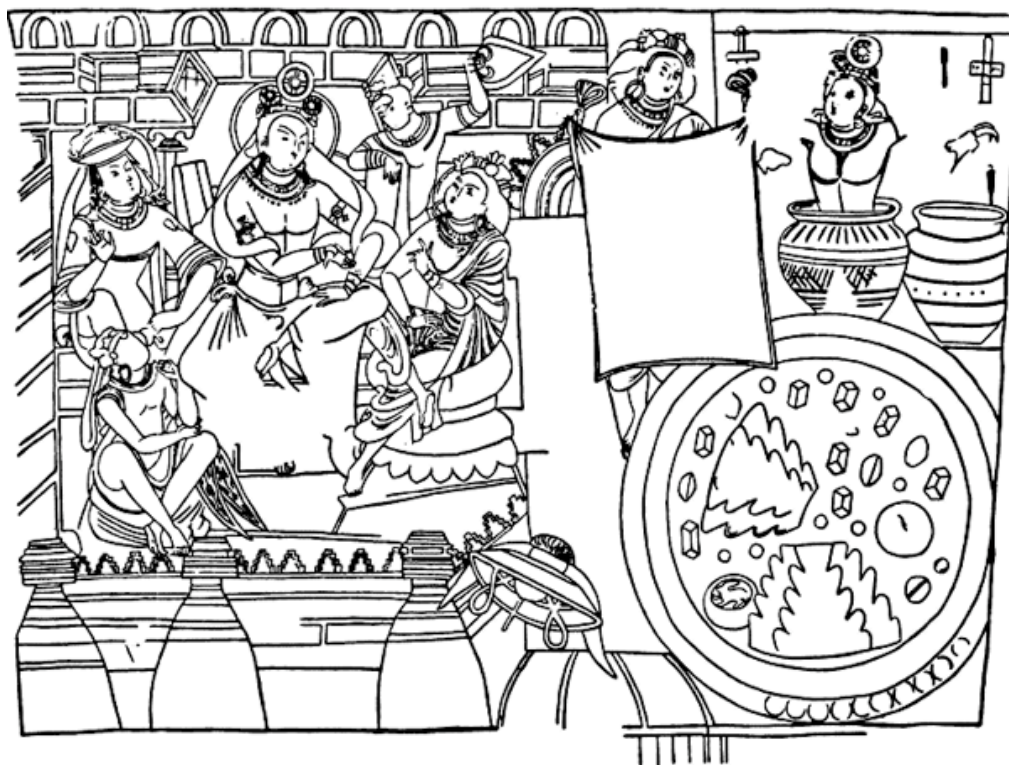
³ Pundure, Irena: Latvian Dainas Testify to Perpetual Calendar. Talk given at SEAC Conference, Klaipeda. 2007

Who knows – perhaps this same “lunatic” cycle is also the basis of the 73 virgins that are promised to Islamic martyrs in paradise (alleged to be one of the motives for the suicidal terror-attacks of 9-11).

Other ancient and recent mythological links

Besides the fact that the gestation period of rabbits is about one lunar month, we find associations between the hare and the Moon in the Indian myths of the Panchatantra. In one tale, tricky rabbits convince the elephants that they come from the giant Moon.⁴

In ancient Buddhist literature, we find the hare in the Moon at the Buddha's death, when the world-mountain Meru collapse, mill-trees unhinge, and the skambha crumbles.⁵



8.3. Scrubling skambha with hare in the face of the moon

In ancient Mesoamerican culture, we find rabbits in the Moon in many representations.⁶

⁴ Hartwig, Ernst: Der Hase in der Mondscheibe. Veröffentlichungen der Remeis-Sternwarte zu Bamberg. Reihe II, Band I. Bamberg. C.C. Buchners Verlag. 1923

⁵ A. Gruenwedel, Altbuddhistische Kultstaetten in Chinesisch Turkestan, D. Reimer, Berlin, 1912.

⁶ Austin, Alfredo Lopez: The Rabbit in the Face of the Moon. Mythology in the Mesoamerican Tradition. Salt Lake City. University of Utah Press. 1996.



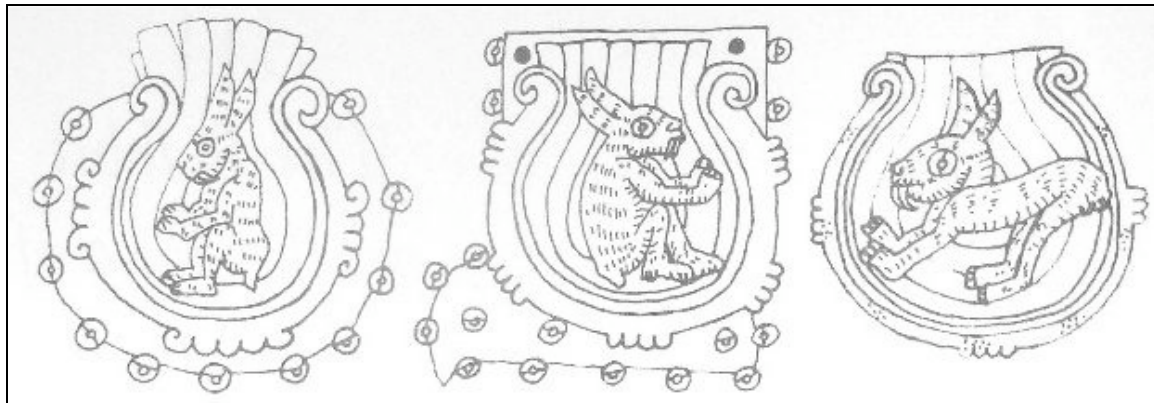
8.4 Mayan Moon Goddess



8.5 Mixtec Tlaxiaco stela monument



8.6. Mesoamerican



Representations of the Moon as a vessel containing a rabbit (Codex Borgia)

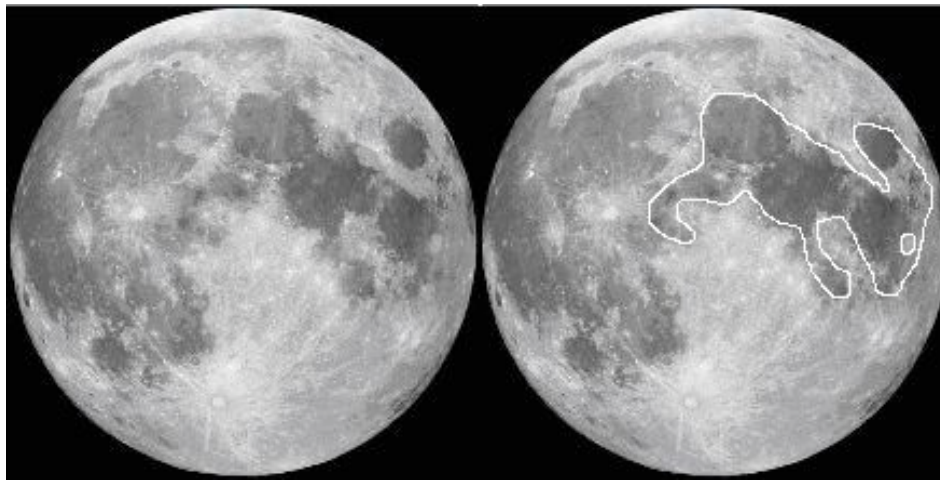
In Western culture, we find a pagan echo of the Hare in the moon in the Easter Bunny, which every year still appears at the spring full moon. In Japan and China, the Moon-Hare appears in autumn equinox festivals, and customs like the moon cakes and lamps in the shape of a hare remind us of the myth of the Jade Hare.

Imaginative linkage

With some imagination, a hare or rabbit can be identified easily in the dark spots on the face of the Moon.



8.8. Fanciful images of a hare in the Moon's face



8.9. Best concept of a hare in the *Moon's* disk

The shape of a hare on the disk of the moon is best observed at the waxing and full Moon and is shown by the bright and dark spots: Mare crisium (ears), mare foecunditatis (head), langrenus (eye), mare tranquilitatis (breast), mare serenitatis (body), mare nectaris (front legs), *and* mare vaporum (back legs).

Calendrical linkage

The 73-day period is found in old customs such as those found in the Old Styrian Farmers' Almanac, which is still in print.⁷ The autumn equinox (St. Rupert) and December 6th (St. Nicholas) are singled out in old rural sayings and customs of the Austrian Alps, where on the eve of St. Nicholas' Day, the saint is accompanied by a black devil (Krampus or Percht/Ruprecht) when visiting children and bringing gifts. If at autumn equinox is a full moon (Rupert, meaning brightness), then 73 days later on the eve of St. Nicholas, there is a dark moon (represented by the Krampus).

Dating the fairy tale

On the 74th run of Hare and Hedgehog, blood runs out of the hare's neck and it dies. If this is interpreted as a total lunar eclipse, the tale gives us an opportunity to date it.

Four dates are given in the fairy tale and provide us with conditions (→) that must be fulfilled to date the event.

1. The geographical location: Buxtehude or Buxhoevden → The eclipse must be visible in Northern Germany.
2. The (celestial) location at start of the race: The heath with flowering buckwheat → the Sun and the Moon at the fall equinox must be near the star Spica, the wheat ear.
3. The calendrical date at start of the race: A special Sunday in autumn → a new (dark) moon Sunday at the autumn equinox.
4. The date of end of the race: at the 74th run → a total lunar eclipse on the 74th day after a fall equinox full moon Sunday.

⁷ Walter, Sepp: Der steirische Mandlkalender. Leykam-Alpina. Graz.

Sat	1862	Dec	06	07:40	T-	123	0.216	2.541	1.416	115m	46m
Mon	1797	Dec	04	04:18	T+	122	-0.085	2.732	1.702	109m	50m
Thu	1406	Nov	25	21:32	T	106	-0.310	2.299	1.310	101m	38m
Sun	1425	Nov	25	21:27	T	116	0.361	2.218	1.204	101m	32m
Wed	1471	Nov	27	20:39	T	107	0.375	2.232	1.139	106m	29m
Sat	1490	Nov	27	05:22	T	117	-0.304	2.320	1.253	112m	38m
Mon	1164	Nov	30	13:18	T+	102	-0.062	2.812	1.708	115m	52m
Wed	1099	Nov	30	16:14	Tm	101	-0.108	2.713	1.639	112m	50m
Sun	0708	Dec	02	13:38	T-	85	0.138	2.622	1.620	106m	48m
Sat	0773	Dec	04	02:49	T+	86	-0.230	2.513	1.389	114m	45m
Mon	0792	Dec	03	09:57	T	96	0.440	2.126	1.008	105m	7m
Fri	0401	Dec	06	23:34	T-	80	0.270	2.434	1.322	112m	42m
Thu	0317	Dec	05	04:44	T	69	0.374	2.190	1.186	99m	31m
Sun	0336	Dec	05	05:13	T	79	-0.292	2.335	1.341	101m	39m
Wed	0322	Dec	07	10:10	T	70	-0.424	2.122	1.068	101m	20m

8.10. List of all total lunar eclipses 73 or 74 days after fall equinox 0-1900⁸

Because the eclipse has to occur on the 74th day after a fall equinox Sunday, this happens on a Wednesday evening or Thursday morning. Of all eclipses in the past 2000 years, only three follow a Sunday autumn equinox and only one matches perfectly: the one of Dec 5th 317 CE!

Everybody is invited to search for better calculations or interpretations of this fairy tale, which seems to mark the transition from a lunar paradigm and calendar to a solar one. Is it purely coincidence that it occurs so close in time to the Nicean Council of 325, which so strongly affected the history of the Christian Church?

A pictorial echo of the moonhare as well as a political and religious parallel of the solar paradigm overcoming the lunar calendar is found in the many popular motifs of the medieval propaganda during the struggle between the Byzantine Empire against the Islamic expansion: The Eagle as the heraldic animal of the Byzantines catches and subjugates a hare, which symbolizes the Mohammedans, who follow a lunar only calendar.



Relief slaps of Museum of Thessaloniki and Museum Ypati

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⁸ Espenak, Fred: Five Millennium Catalog of Lunar Eclipses.
<http://sunearth.gsfc.nasa.gov/eclipse/LEcat/LEcatalog.htm>

The symbolism of the commensurable calendrical periods of the Sun and the Moon still lives on in a slightly twisted and funny way in recent customs of 2nd February (Candlemas) at Punxsutawney in Pennsylvania/US. The movie “Groundhog Day” portrays this in an ever end ever repeating time loop, where the Groundhog represents the more and more brighter Sun after winter, similar to Japanese Sun Goddess Amaterasu coming out of a cave.